

Reptile Survey Report



Dwyer Road, Reading

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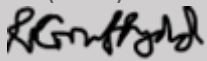
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Quality Assurance

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK ADAS Ltd.

Summary

An initial Preliminary Ecological Appraisal (PEA) was carried out by ADAS in October 2022 (ADAS 2022) of the brownfield site on Dwyer Road, Reading, Berkshire RG30 3PN. This was to inform planning for the development of two and three-bedroom residential houses at the site. The PEA was updated in January 2023 following significant vegetation clearance at the site (ADAS 2023). The PEA identified grassland, woodland, scrub and perennial habitats suitable for widespread reptile species.

ADAS was commissioned by Gleeds Cost Management Ltd, on behalf of the client, Reading Borough Council, to undertake a survey for widespread reptile species at the site. This survey consisted of seven visits in April and May 2023 by Assistant Ecological Consultants Amelia McCormack BSc (Hons) MSc, Genevieve Barrett BSc (Hons) and Rhodri Gruffydd BSc (Hons) MSc.

On 23 March 2023, 45 reptile refugia 'mats' were placed in areas of suitable reptile habitat such as on the edge of scrub and grassland on the site. Seven reptile survey visits were carried out in suitable weather conditions between 4 April and 5 May 2023.

No reptiles were recorded under refugia or in other basking locations around the site during the seven visits. No other mammal or amphibian species were recorded under the refugia.

Based on the results of the survey, it can be concluded that reptiles are likely absent from the site. However, in order to follow best practice and be confident a breach of legislation does not occur it is recommended that precautionary working methods during site clearance are outlined in a Method Statement for reptiles.

As there is suitable reptile habitat on site, scrub and woodland should be retained, where possible, and connected to other suitable habitat in the surrounding landscape. Enhancements to the site could include the creation of hibernacula to increase opportunities for foraging, sheltering and hibernating reptiles.

1 Introduction

1.1 Background and Survey Objectives

A PEA was carried out by ADAS in October 2022 (ADAS 2022) of the brownfield site on Dwyer Road, Reading, Berkshire RG30 3PN (central OS grid reference: SU 68232 71885), herein after referred to as ‘the site’. This was to inform planning for the development of two and three-bedroom residential houses at the site. The PEA was updated in January 2023 following significant vegetation clearance at the site (ADAS 2023).

The PEA identified grassland, woodland, scrub and perennial habitats suitable for widespread reptile species, including Grass Snake (*Natrix helvetica*), Common Lizard (*Zootoca vivipara*), Slow-worm (*Anguis fragilis*) and Adder (*Vipera berus*).

ADAS was commissioned by Gleeds Cost Management Ltd, on behalf of the client, Reading Borough Council, to undertake a survey for reptiles at the site. The objectives of the survey were to:

- Determine the presence or likely absence of widespread reptiles at the site;
- Assess the reptile population if present; and
- Detail any mitigation measures and further actions required to ensure the proposed development does not negatively impact reptiles.

1.2 Site Description

The site was a c. 0.5 ha brownfield site located on the corner of Dwyer Road and Burghfield Road, in the residential area of Southcote in West Reading, Berkshire (Figure 1). The site was the location of a former care home known as Alice Burrows House, which was demolished 14 years ago, and has since been left unmanaged. The site was overgrown with vegetation, including successional shrubs, scattered scrub and trees, at the time of the original survey but the majority of this had been cleared prior to the updated PEA in January 2023 (ADAS 2023) leaving semi-improved grassland, ephemeral vegetation and large amounts of brash and wood chip piles present throughout the site. Excessive amounts of fly tipping and anthropogenic waste were recorded in most areas of the site.

The wider landscape consisted of the mixed urban and residential areas in West Reading, with public greenspaces such as Prospect Park Local Wildlife Site approximately 500 m northwest, and the railway line running approximately 500 m south of the site. Beyond this to the south were a mix of agricultural fields as well as important terrestrial and freshwater habitats, including Holy Brook, the River Kennet and a number of lakes created from disused quarries.



Figure 1. Site location and wider landscape (site indicated by red line boundary)
Image and red line boundary provided by client: RBC Site Options Amythist _ Dwyer _compressed (005) - Copy_Part17.

1.3 Description of the Proposed Development

The proposed development includes the construction of two and three-bedroom residential houses, with three semi-detached three-storey buildings along the southern side of the site; a row of terraced housing with two three-storey and nine two-storey buildings running east to west through the centre of the site, and two additional buildings in the north of the site; with associated landscaping, parking and access from Appleford Road. The majority of the habitats on site will be lost to facilitate the development.

Construction is anticipated to commence in August 2023.

2 Legislation

2.1 Reptiles

The four widespread species of reptile, Grass Snake, Slow-worm, Common Lizard and Adder, are protected under the Wildlife and Countryside Act 1981 (as amended). It is an offence to kill or injure them.

It is not an offence to capture or disturb them, or to damage their habitat. However, any actions that damage their habitat could result in the killing or injuring of reptiles, and hence could be illegal.

The rarer Sand Lizard (*Lacerta agilis*) and Smooth Snake (*Coronella austriaca*) receive additional protection under the Conservation of Habitats and Species Regulations 2017 (as amended). It is an offence to kill, injure, capture or disturb them. It is also an offence to damage or destroys their breeding sites or resting places.

All six native British species of reptile are also listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, making them Species of Principal Importance in England.

N.B. The site is not considered suitable to support Sand Lizard or Smooth Snake as it is outside their known range and no suitable habitat on site.

2.2 Local Planning Policy

Table 1 details the policies within the Reading Borough Local Plan (adopted in 2019) which are relevant to the ecological features associated with reptiles on site.

Table 1: Summary of relevant local planning policy – Reading Borough Local Plan.

Policy	Description
EN12: Biodiversity and the Green Network	a) The identified Green Network, the key elements of which are shown on the Proposals Map, shall be maintained, protected, consolidated, extended and enhanced. Permission will not be granted for development that negatively affects the sites with identified interest or fragments the overall network. The Green Network comprises: • Sites with identified biodiversity interest - Local Wildlife Sites, Local Nature Reserves, Biodiversity Opportunity Areas, protected and priority species and their habitats, Priority and Biodiversity Action Plan habitats, and the River Thames and all its tributaries (including the River Kennet and the Kennet & Avon Canal); and • Areas with potential for biodiversity value and which stitch the Green Network together – designated Local Green Space and open green spaces, and existing and potential Green Links. New development shall demonstrate how the location and type of green space, landscaping and water features provided within a scheme have been arranged such that they maintain or link into the existing Green Network and contribute to its consolidation. Such features should be designed to maximise the opportunities for enhancing this network. All new development should maximise opportunities to create new assets and links into areas where opportunities are as yet unidentified on the Proposals Map.

Policy	Description
	b) On all sites, development should not result in a net loss of biodiversity and geodiversity, and should provide a net gain for biodiversity wherever possible. Development should: • Protect and wherever possible enhance features of biodiversity interest on and adjacent to the application site, incorporating and integrating them into development proposals wherever practicable; and • Provide new tree planting, wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable. In exceptional circumstances where the need for development clearly outweighs the need to protect the value of the site, and it is demonstrated that the impacts cannot be: 1) avoided; 2) mitigated or; 3) compensated for on-site; then new development will provide off-site compensation to ensure that there is “no net loss” of biodiversity. Provision of off-site compensation shall be calculated in accordance with nationally or locally recognised guidance and metrics. It should not replace existing alternative habitats, and should be provided prior to development.
EN14: Trees, Hedges and Woodlands	Individual trees, groups of trees, hedges and woodlands will be protected from damage or removal where they are of importance, and Reading’s vegetation cover will be extended. The quality of waterside vegetation will be maintained or enhanced. New development shall make provision for tree retention and planting within the application site, particularly on the street frontage, or off-site in appropriate situations, to improve the level of tree coverage within the Borough, to maintain and enhance the character and appearance of the area in which a site is located, to provide for biodiversity and to contribute to measures to reduce carbon and adapt to climate change. Measures must be in place to ensure that these trees are adequately maintained.

2.3 National Planning Policy Framework

The National Planning Policy Framework July 2021, is an update to the previous version issued in February 2019, and is a policy framework document which provide a range of important principles. Paragraph 174 of the NPPF states that decisions should contribute to and enhance the natural local environment by:

‘Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.’

Paragraph 175 goes on to state:

‘... take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.’

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles (paragraph 180):

‘Opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.’

3 Methodology

3.1 Field Survey

On 23 March 2023, 45 reptile refugia 'mats' (0.5 m x 0.5 m roofing felt mats) were placed in areas of suitable reptile habitat such as on the edge of scrub and grassland on the site (Appendix 1). Best practice guidance for reptile surveys recommends 5-10 refugia per hectare (Froglife 1999) which was exceeded in this case.

Seven reptile survey visits were carried out in suitable weather conditions (i.e., between 10°C and 18°C, with low wind and no rain) between 4 April and 5 May 2023 by ADAS Assistant Ecological Consultants Amelia McCormack BSc (Hons) MSc, Genevieve Barrett BSc (Hons) and Rhodri Gruffydd BSc (Hons) MSc. See Table 2 below for a full description of each survey visit.

Table 2: Reptile survey dates, times, weather conditions and surveyor¹.

Survey Visit	Date	Time	Weather	Surveyor
1	05.04.2023	11:45	Sunny and mild 11°C, CC 6, wind 2, 0 mm	Amelia McCormack
2	11.04.2023	11:00	Partial sunshine, mild 15°C, CC 4, wind 1, 0 mm	Genevieve Barrett
3	17.04.2023	13:15	Partial sunshine, mild 16°C, CC 4, wind 0, 0 mm	Genevieve Barrett
4	19.04.2023	16:30	Sunny, warm and gusty 16°C, CC 3, wind 3, 0 mm	Amelia McCormack
5	23.04.2023	10:00	Sunny, breezy, warm in the sun 10°C, CC 1, wind 3, 0 mm	Rhodri Gruffydd
6	24.04.2023	11:30	Bright and dry 10°C, CC 7, wind 0, 0 mm	Amelia McCormack
7	05.05.2023	13:00	Sunny spells, warm, following a morning of heavy rain 15°C, CC 5, wind 2, 0 mm	Rhodri Gruffydd

On each survey visit, the surveyor walked slowly around the site and checked under the refugia mats for reptiles. Visual searches of suitable basking habitat were also undertaken during the surveys. The number,

¹ For weather: temperature in °C, cloud cover (CC) in oktas, wind in Beaufort Scale and precipitation in mm

sex and species of any reptiles found were recorded. The date, weather and average temperature were all recorded on each occasion.

The method used for the surveys were in accordance with best practice guidelines as published by Gent & Gibson (1998) and Froglife (1999). Each population size was then categorised following Table 3.

Table 3. Population classifications based upon a maximum number of adults seen by observation and/or under tins (placed at a density of up to 10 per hectare) by one surveyor in one day (Froglife, 1999)

Species	Low Population	Good Population	Exceptional Population
Adder	<5	5 - 10	>10
Grass Snake	<5	5 - 10	>10
Common Lizard	<5	5 - 20	>20
Slow Worm	<5	5 - 20	>20

3.2 Limitations and Constraints

All survey visits were conducted during suitable weather conditions following standard methodologies and survey protocols. However, the temperatures during the third and fourth visits on 23 and 24 April were on the lower threshold of optimal survey temperatures and the wind was a little high during the third visit.

It is considered that the survey conditions were satisfactory with only minor constraints.

4 Results and Discussion

No reptiles were recorded under refugia or in other basking locations around the site during the seven visits. No other mammal or amphibian species were recorded under the refugia. One Muntjac Deer (*Muntiacus reevesi*) was noted during the first visit.

The full survey results can be seen in Appendix 3.

Based on the results of the survey, it can be concluded that reptiles are likely absent from the site. however in in line with best practice and to be confident that an offence is not caused under the legislation it is recommended that precautionary working methods, including a 2 stage cut of suitable habitat under ecological supervision are outline in a method statement.

5 Enhancement Opportunities

As there was suitable reptile habitat on site, it is recommended that reptile enhancements are incorporated into the proposed development. This is to provide a net gain for biodiversity where possible, in line with the Reading Borough Local Plan.

Habitat features such as scrub, tree lines and broadleaved woodland should be retained where possible, as they provide suitable habitat for foraging, commuting and sheltering reptiles. These habitats should be connected to other suitable habitat in the surrounding landscape.

Two hibernacula could be created within the site to increase resting and hibernating opportunities for reptiles (Figure 2). These hibernacula may also be utilised by amphibians and invertebrates. Hibernacula with above-ground log-piles would provide further habitat suitable for refuge in the active season. Hibernacula should be located along scrub, tree lines or woodland edges, ideally with south-facing aspects exposed to the sun for basking on emergence.

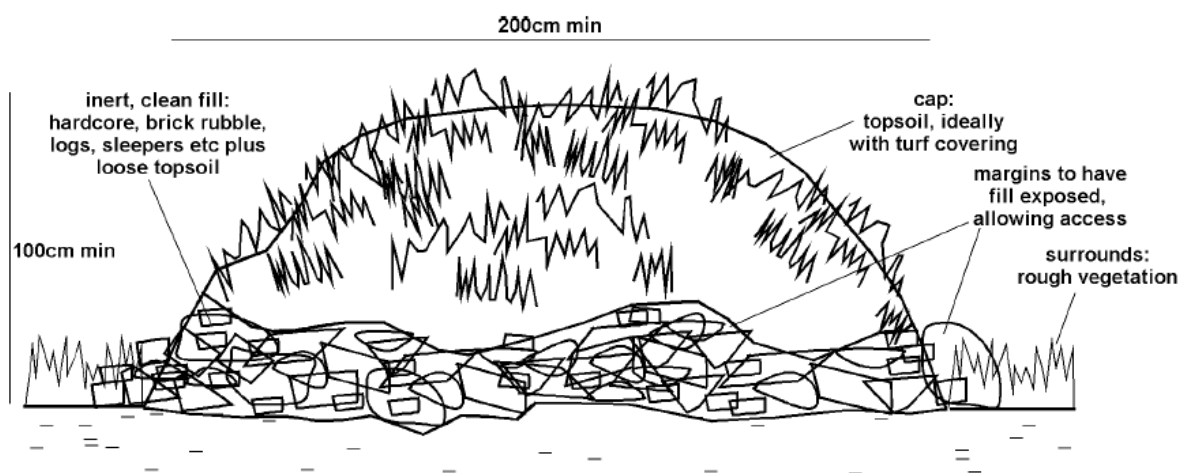


Figure 2. Hibernacula design for reptiles and amphibians

6 References

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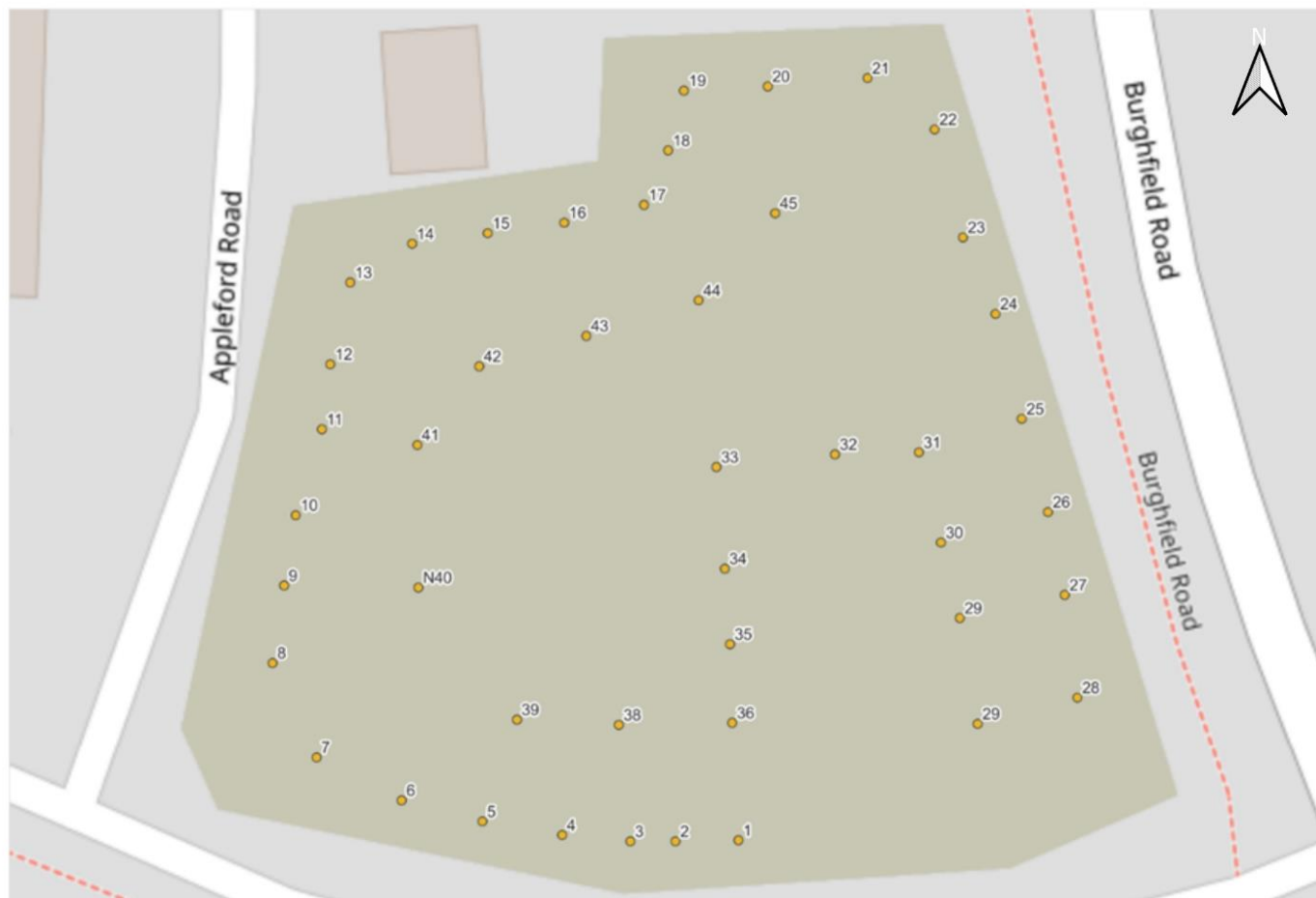
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Appendix 1: Reptile Refugia Map

See following page.



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Reptile Refugia Map

Dwyer Road, Reading



ADAS, 11D Park House, Milton Park,
Abingdon, Oxfordshire OX14 4RS

Drawn by Rhodri Gruffydd on 11/05/2023.

Appendix 2: Survey Results

See following page.

WL6 Reptile Survey Record From

Site Name	Dwyer Road, Reading	
Date mats set out	23.03.2023	
No. of mats set out	45	

Date		05.04.2023	11.04.2023	17.04.2023	19.04.2023	23.04.2023	24.04.2023	05.05.2023
Start Time		11:45	11:00	13:15	16:30	10:00	11:30	13:00
End Time		12:15	12:00	14:00	16:45	10:40	12:00	13:30
Weather conditions	Temperature (oC)	11	15	16	16	10	10	15
	Cloud Cover (otkas)	6	4	4	3	1	7	5
	Wind Force (Baeufort)	2	1	0	3	3	0	2
	Precipitation	0	0	0	0	0	0	0
	Notes	Sunny, bright and mild	Partial sunshine, mild	Partial sunshine, mild	Sunny, warm and gusty	Sunny, breezy, warm in the sun	Bright and dry	Sunny spells, warm, following a morning of heavy rain
Reptile Nos. (juv., adult)	Slow-worm	0	0	0	0	0	0	0
	Common Lizard	0	0	0	0	0	0	0
	Grass Snake	0	0	0	0	0	0	0
	Adder	0	0	0	0	0	0	0
Amphibians		0	0	0	0	0	0	0
Other Species		Muntjac	0	0	0	0	0	0
Notes (use Record Forms for notes for individual mats for each survey)		Na	Na	Na	Na	Na	Na	Na
Surveyor		AM	GB	GB	AM	RG	AM	RG
Checked by		STM	STM	STM	STM	STM	STM	STM